Pacific Northwest National Laboratory Environmental Management Performance Report

October 2000

PREPARED FOR THE U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE
OFFICE OF ENVIRONMENTAL MANAGEMENT

Pacific Northwest National Laboratory
Operated for the U.S. Department of Energy
by Battelle Memorial Institute

Table of Contents

This document provides the Department of Energy Richland Operations Office (DOE-RL) with a report of the Pacific Northwest National Laboratory (PNNL) performance by Battelle Memorial Institute and its subcontractors.

In Section A, the Executive Summary, text and graphics report the safety metrics status for all PNNL activities. Senior management's overall performance assessment of all Environmental Management activities conducted at PNNL is presented in a stoplight chart.

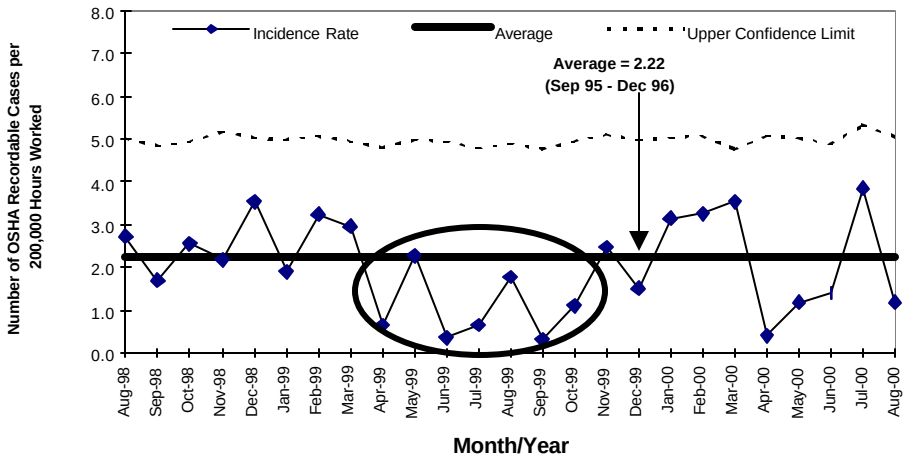
Section B, Project Performance Summary, provides a brief summary of the month's performance for the PNNL lead activity, PNNL Waste Management (PBS RL-ST01). More detailed information can be found within PNNL-7911-105a, PNNL's Project Status Report for June 2000. Summary analyses pertaining to PNNL's support to other Project Baseline Summaries (PBSs) are addressed in the contractor's report having lead responsibility for that scope.

Unless otherwise noted, information in this report is current as of August 27, 2000.

This section provides an executive-level summary of performance information and is intended to bring to management's attention that information considered to be most noteworthy. The section begins with overviews of safety, followed by a stoplight chart on overall performance.

Safety Overview

The focus of this section is on documenting trends in work-related injury and illness rates. The rates are presented graphically in this section and are tracked for significant changes. Current efforts to improve performance are being made through the continued implementation of the Integrated Environment, Safety and Health Maintenance System (ISMS), and the development and implementation of the Voluntary Protection Program (VPP).

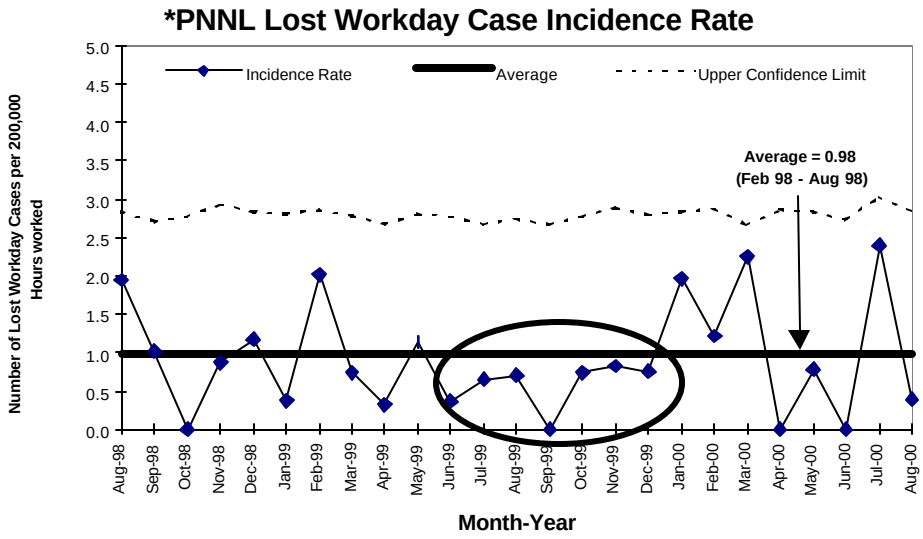


FY 00Rate Overview:
Cumulative To Date = 2.12
Lab Upper Limit ≤ 2.3

This indicator has been generally stable over the long term. There was a decrease in the rates during the period of April 99 - October 99 followed by a return back to an expected randomly fluctuating pattern within the anticipated control limits.

Green

*Includes all Pacific Northwest National Laboratory Operations.

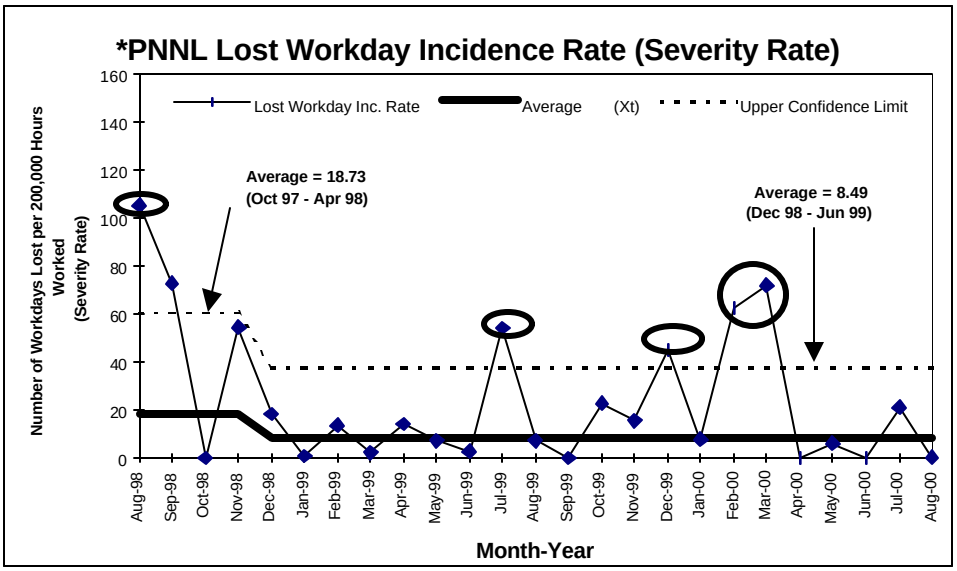


FY 00Rate Overview:
Cumulative To Date = 1.02
Lab Upper Limit ≤ 1.2

This indicator has been generally stable over the long term. There was a temporary short-term decrease during the period of June 99 - December 99 followed by a return back to an expected randomly fluctuating pattern within the anticipated control limits.

Green

*Includes all Pacific Northwest National Laboratory Operations.



FY 00Rate Overview:
Cumulative To Date = 23.88
Lab Upper Limit ≤ 30.0

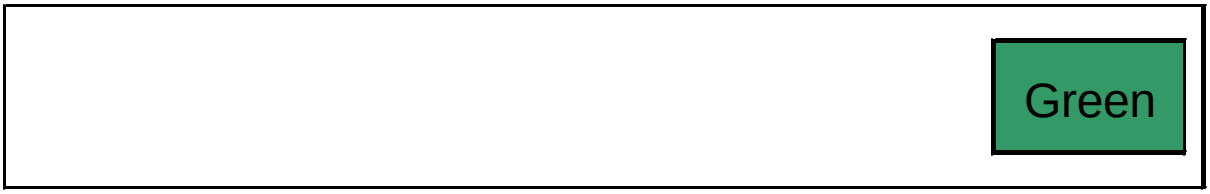
The data for the last five months have been randomly cycling within the normal anticipated control limits. Months that are above the upper control limit with cases currently accumulating lost workdays are February 00 and March 00.

Green

*Includes all Pacific National Laboratory Operations.

Cost/Schedule Performance Stoplight

The following rating reflects overall cost and schedule performance for activities conducted by PNNL. *(Narrative not required when rating is green.)*



Green:	Satisfactory
Yellow:	Significant improvement required
Red:	Unsatisfactory

This section provides cost and schedule performance, any significant issues, and upcoming baseline change requests for the period covered. In fiscal year (FY) 2000, Battelle Memorial Institute has lead responsibility over PBS RL-ST01, PNNL Waste Management WBS 1.7.1.

Mission

WBS 1.7.1 provides PNNL with waste management services and compliant operations in support of science and technology development for the multiprogram needs of the U.S. Department of Energy (DOE) Complex. These services include:

- essential surveillance and maintenance of DOE laboratory facilities assigned to PNNL for safe containment of radioactive and hazardous materials
- infrastructure required to manage wastes and effluents currently generated at the PNNL
- operational compliance services to meet regulatory requirements and operating permits including environment, safety, and health regulations
- management of legacy wastes and contamination remaining from past PNNL research operations.

Performance Data and Analysis

As of August 27, 2000 the cumulative costs are $12 million with a positive cost variance of $0.6M and a cumulative schedule variance of negative $0.8M. Though a majority of the schedule variance will be recovered prior to the end of the fiscal year a brief explanation of the activities that will not recover are described following the tables and chart.

Cost Performance ($M):			
	BCWP	**ACWP**	**Variance**
PNNL Waste Management	$12.6	$12.0	$0.6
Schedule Performance ($M):			
	BCWP	**BCWS**	**Variance**
PNNL Waste Management	$12.6	$13.5	($0.8)

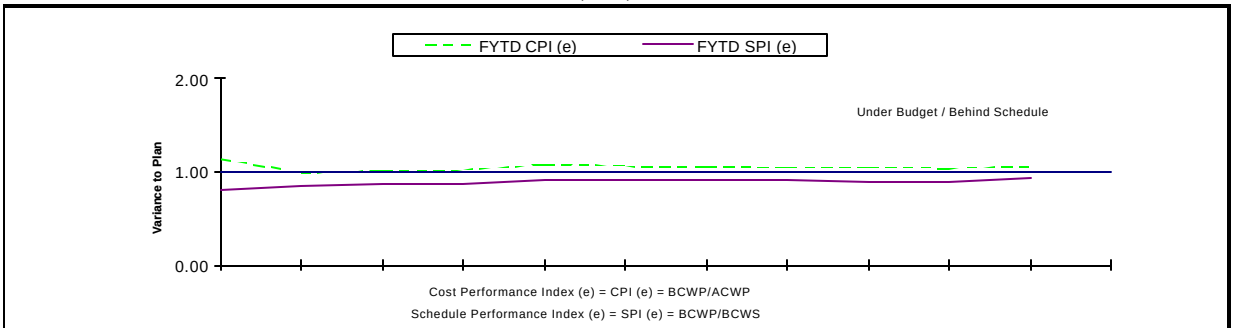
FY 2000 Cost/Schedule Performance - All Fund Types
Cumulative to Date Status - ($000)

WBS	PBS	BCWS	BCWP	ACWP	CV	%	SV	%
1.7.1	RL-ST01	$13,472	$12,638	$12,002*	$636	5	$(834)	-6
	Total	$13,472	$12,638	$12,002*	$636	5	$(834)	-6

* Numbers reflect PNNL only; $74K expended by Fluor bringing actuals to $12,076K.

Cost / Schedule Performance Indices

FY 2000 Cum to Date Status
($000s)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	TOTAL
Monthly BCWS	1227	976	1027	1311	1183	1331	1500	1322	1294	1462	840	1614	15086
Monthly BCWP	1000	869	941	1165	1297	1191	1353	1137	989	1259	1438		12638
Monthly ACWP	879	1004	903	1111	1000	1186	1342	1168	936	1251	1222		12002
Monthly CPI (e)	1.14	0.87	1.04	1.05	1.30	1.00	1.01	0.97	1.06	1.01	1.18		
Monthly SPI (e)	0.82	0.89	0.92	0.89	1.10	0.89	0.90	0.86	0.76	0.86	1.71		
FYTD BCWS	1227	2203	3230	4542	5725	7056	8555	9877	11171	12633	13472	15086	
FYTD BCWP	1000	1869	2810	3975	5272	6462	7815	8952	9942	11200	12638		
FYTD ACWP	879	1883	2786	3897	4897	6083	7425	8593	9529	10780	12002		
FYTD CPI (e)	1.14	0.99	1.01	1.02	1.08	1.06	1.05	1.04	1.04	1.04	1.05		
FYTD SPI (e)	0.82	0.85	0.87	0.88	0.92	0.92	0.91	0.91	0.89	0.89	0.94		

The positive cost variance of $0.6M results from reduced overhead rates and delayed billings. A change request was submitted on September 14 to replace/upgrade the HVAC within Radiochemical Processing Laboratory (RPL) using programmatic underruns. This effort is necessary to maintain safety envelope within the facility. It is expected that the remaining programmatic baseline activities will be completed within the funding allocation.

The cumulative schedule variance is within reporting thresholds. Some activities that will not be completed this fiscal year are described below:

- Planned LR-56 cask shipments to the 200 Area for final disposition are affected by the radioactive liquid waste system (RLWS) delay. One shipment of waste was deleted following approval and implementation of a change request. At this time, as much waste as possible is being held for the radioactive liquid waste tank (RLWT) when it comes on line. The remaining scheduled waste shipment affected by the RLWS will be rebaselined into FY 2001 via a change request that is in process ($165K).
- Air emissions inventory and air compliance inspections for six R&D laboratories will be deferred from FY 2000 to FY 2001. This scope is being delayed because the schedule for the regulatory driver was delayed, and other work then became a higher priority for available staff resources. This scope should be carried over to avoid compliance issues with State, Federal, and Benton Clean Air Authority air regulations and permits. A baseline change request was submitted September 14 to defer this scope ($34K).
- The 305-B has operated to a final status Part B permit Waste Analysis Plan (WAP) since 1994. The compliance requirements of the plan are outlined in three locations 1) the WAP submitted with the 305-B permit application, 2) Ecology's permit conditions placed on 305-B operations,

and 3) within a set of documented WAP/permit condition clarifications, which were the result of a meeting between DOE, PNNL, and Ecology. PNNL had planned to revise the 305-B WAP in FY99 in order to consolidate all the compliance requirements scattered throughout the three locations identified above into one up to date WAP. Though this effort was carried over from FY 1999, a decision has been made to not consolidate the plan until permit conditions require revision. A baseline change request was submitted September 14 to delete this scope ($16K).

The integrity assessment of the RLWT-piping is currently on hold with no defined completion date. The integrity assessment was delayed because the 204-AR Facility (receiver facility) is not ready, and Pacific Northwest did not want to add any liquids to the tank to make it a radiologically controlled tank until the receiver facility is ready. The earliest the 204-AR Facility will receive waste via the LR-56 Truck is FY 2001.